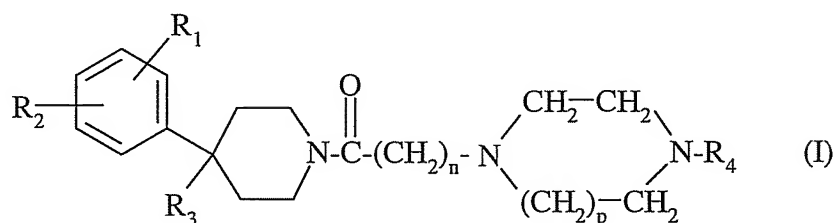


Amendment Pursuant to 37 C.F.R. § 1.121

IN THE CLAIMS:

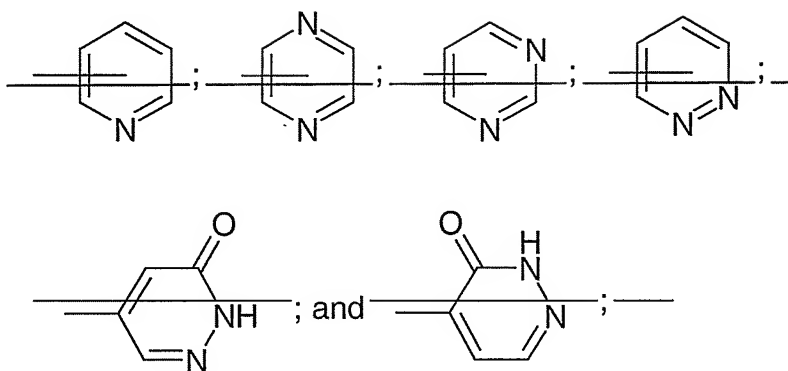
The claims set forth below with amendments as indicated will replace all prior versions and listing of claims in the application.

1. (Currently amended): A compound of formula (I):



in which:

- n is 1 or 2;
- p is 1 or 2;
- R₁ represents a halogen atom; a trifluoromethyl radical; a (C₁-C₄)alkyl; a (C₁-C₄)alkoxy; or a trifluoromethoxy radical;
- R₂ represents a hydrogen atom or a halogen atom;
- R₃ represents a hydrogen atom; a group -OR₅; a group -CH₂OR₅; a group -NR₆R₇; a group -NR₈COR₉; a group -NR₈CONR₁₀R₁₁; a group -CH₂NR₁₂R₁₃; a group -CH₂NR₈CONR₁₄R₁₅; a (C₁-C₄)alkoxycarbonyl; or a group -CONR₁₆R₁₇;
- or else R₃ constitutes a double bond between the carbon atom to which it is attached and the adjacent carbon atom of the piperidine ring;
- R₄ represents **a pyrazinyl** ~~an aromatic group selected from:~~



- ~~the said aromatic groups~~ which is being unsubstituted or being mono- or disubstituted by a substituent selected independently from a halogen atom; a (C₁-C₄)alkyl; a (C₁-C₄)alkoxy; and a trifluoromethyl radical;
- R₅ represents a hydrogen atom; a (C₁-C₄)alkyl; or a (C₁-C₄)alkylcarbonyl;
- R₆ and R₇ represent each independently a hydrogen atom or a (C₁-C₄)alkyl;
- R₈ represents a hydrogen atom or a (C₁-C₄)alkyl;
- R₉ represents a (C₁-C₄)alkyl or a group -(CH₂)_m-NR₆R₇;
- m is 1, 2 or 3;
- R₁₀ and R₁₁ represent each independently a hydrogen atom or a (C₁-C₄)alkyl;
- R₁₂ represents a hydrogen atom or a (C₁-C₅)alkyl;
- R₁₃ represents a hydrogen atom, a (C₁-C₅) alkyl, a group -(CH₂)_q-OH or a group -(CH₂)_q-S-CH₃;
- or else R₁₂ and R₁₃, together with the nitrogen atom to which they are attached, constitute a heterocycle selected from aziridine, azetidine, pyrrolidine, piperidine and morpholine;
- q is 2 or 3;
- R₁₄ and R₁₅ represent each independently a hydrogen atom or a (C₁-C₄)alkyl;
- R₁₆ represents a hydrogen atom or a (C₁-C₄)alkyl;
- R₁₇ represents a hydrogen atom, a (C₁-C₅) alkyl, or a group -(CH₂)_q-NR₆R₇;
- or else R₁₆ and R₁₇, together with the nitrogen atom to which they are attached, constitute a heterocycle selected from azetidine, pyrrolidine,

piperidine, morpholine and piperazine which is unsubstituted or substituted in position 4 by a (C₁-C₄)alkyl;
or an acid addition salt ~~hydrate or solvate~~ thereof.

2. (Previously presented): A compound according to Claim 1 wherein:
 - R₁ is in position 2, 3 or 4 of the phenyl and represents a trifluoromethyl radical, a chlorine atom, a methyl, a methoxy or a trifluoromethoxy radical and R₂ represents a hydrogen atom; or else R₁ is in position 3 of the phenyl and represents a trifluoromethyl radical and R₂ is in position 4 of the phenyl and represents a chlorine atom.
3. (Previously presented): A compound according to Claim 1 wherein:
 - R₃ represents a hydrogen atom, a hydroxyl, a methoxy, an (acetyloxy)methyl, a hydroxymethyl, a dimethylamino, an acetylamino, an aminomethyl, a (methylamino)methyl, a (dimethylamino)methyl, a (diethylamino)methyl, an (isopropylamino)methyl, an (N-methylisopropylamino)methyl, an (isobutylamino)methyl; an (N-methylisobutylamino)methyl, an (isopentylamino)methyl, an (N-methylisopentylamino)methyl, an aminocarbonyl, or an azetidin-1-ylcarbonyl; or else R₃ constitutes a double bond between the carbon atom to which it is attached and the adjacent carbon atom of the piperidine ring.
4. (Currently amended): A compound according to Claim 1 wherein:
 - R₄ represents ~~a 2-pyridyl, a 6-methyl-2-pyridyl, a 3-(trifluoromethyl)-2-pyridyl, a 5-(trifluoromethyl)-2-pyridyl, a 3-chloro-5-(trifluoromethyl)-2-pyridyl, a 3-pyridyl, a 4-pyridyl, a 3,5-dichloro-4-pyridyl,~~ a 2-pyrazinyl, a 5-chloro-2-pyrazinyl; or a 6-chloro-2-pyrazinyl, ~~a 2-pyrimidinyl, a 4-(trifluoromethyl)-2-pyrimidinyl, a 6-chloro-2-pyrimidinyl, a 4-pyrimidinyl, a 6-chloro-4-pyrimidinyl, a 5-pyrimidinyl, a 3-pyridazinyl, a 6-chloro-3-pyridazinyl, a 4-pyridazinyl, a 3(2H)-pyridazinone-5-yl or a 3(2H)-pyridazinone-4-yl.~~
5. (Currently amended): A compound according to Claim 1 wherein:
 - n is 1 or 2;

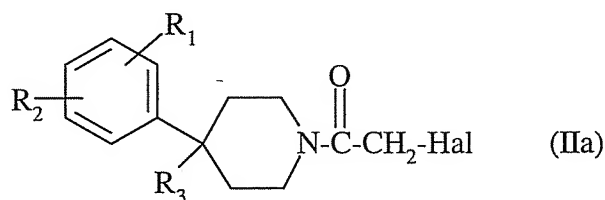
- p is 1 or 2;
- R₁ is in position 2, 3 or 4 of the phenyl and represents a trifluoromethyl radical, a chlorine atom, a methyl, a methoxy or a trifluoromethoxy radical and R₂ represents a hydrogen atom; or else R₁ is in position 3 of the phenyl and represents a trifluoromethyl radical and R₂ is in position 4 of the phenyl and represents a chlorine atom;
- R₃ represents a hydrogen atom, a hydroxyl, a methoxy, an (acetyloxy)methyl, a hydroxymethyl, a dimethylamino, an acetylamino, an aminomethyl, a (methylamino)methyl, a (dimethylamino)methyl, a (diethylamino)methyl, an (isopropylamino)methyl, an (N-methylisopropylamino)methyl; an (isobutylamino)methyl; an (N-methylisobutylamino)methyl, an (isopentylamino)methyl, an (N-methylisopentylamino)methyl, an aminocarbonyl, or an azetidin-1-ylcarbonyl; or else R₃ constitutes a double bond between the carbon atom to which it is attached and the adjacent carbon atom of the piperidine ring;
- R₄ represents ~~a 2-pyridyl, a 6-methyl-2-pyridyl, a 3-(trifluoromethyl)-2-pyridyl, a 5-(trifluoromethyl)-2-pyridyl, a 3-chloro-5-(trifluoromethyl)-2-pyridyl, a 3-pyridyl, a 4-pyridyl, a 3,5-dichloro-4-pyridyl, a 2-pyrazinyl, a 5-chloro-2-pyrazinyl, or a 6-chloro-2-pyrazinyl, a 2-pyrimidinyl, a 4-(trifluoromethyl)-2-pyrimidinyl, a 6-chloro-2-pyrimidinyl, a 4-pyrimidinyl, a 6-chloro-4-pyrimidinyl, a 5-pyrimidinyl, a 3-pyridazinyl, a 6-chloro-3-pyridazinyl, a 4-pyridazinyl, a 3(2H)-pyridazinone-5-yl, or a 3(2H)-pyridazinone-4-yl.~~

6. (Currently amended): A compound according to Claim 1 wherein:

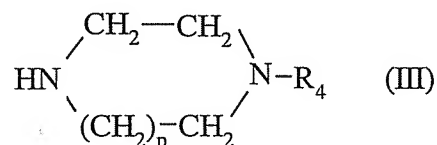
- n is 1;
- p is 1;
- R₁ is in position 2, 3 or 4 of the phenyl and represents a trifluoromethyl radical, a chlorine atom, a methoxy or a trifluoromethoxy radical and R₂ represents a hydrogen atom; or else R₁ is in position 3 of the phenyl and represents a trifluoromethyl radical and R₂ is in position 4 of the phenyl and represents a chlorine atom;
- R₃ represents a hydroxyl, a dimethylamino, an aminomethyl, a (methylamino)methyl, a (dimethylamino)methyl, a (diethylamino)methyl, an

(isopropylamino)methyl, an (isobutylamino)methyl, an (isopentylamino)methyl, an (N-methylisopentylamino)methyl or an aminocarbonyl; or else R₃ constitutes a double bond between the carbon atom to which it is attached and the adjacent carbon atom of the piperidine ring; and - R₄ represents a 2-pyrazinyl, a 4-pyrimidinyl, a 3(2H)-pyridazinone-5-yl or a 5-(trifluoromethyl)-2-pyridyl.

7. (Previously presented): A process for preparing a compound according to Claim 1 in which n = 1
wherein a compound of formula (IIa)

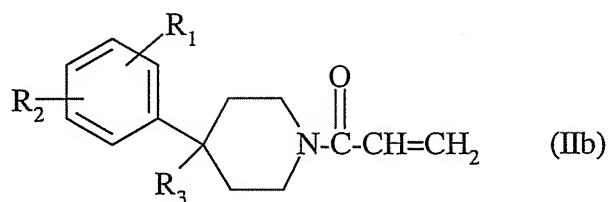


in which R₁, R₂ and R₃ are as defined in Claim 1 and Hal represents a halogen atom, with the proviso that when R₃ contains a hydroxyl or amine function these functions may be protected, is reacted with a compound of formula (III)

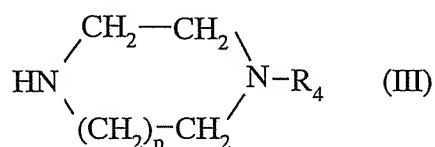


in which p and R₄ are as defined in Claim 1;
and deprotection of the hydroxyl or amine functions present in R₃ where appropriate.

8. (Previously presented): A process for preparing a compound according to Claim 1 in which n = 2
wherein a compound of formula IIb

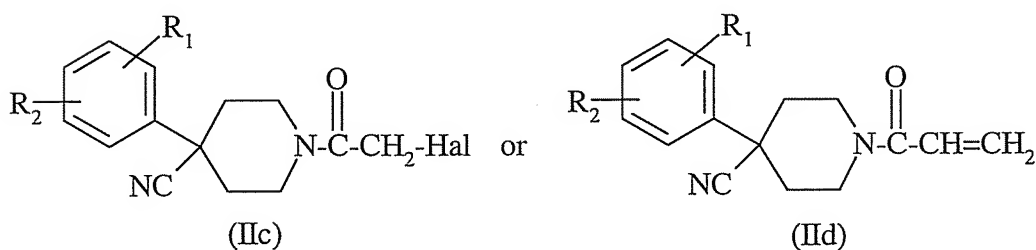


in which R_1 , R_2 and R_3 are as defined in Claim 1, with the proviso that when R_3 contains a hydroxyl or amine function these functions may be protected, is reacted with a compound of formula (III)

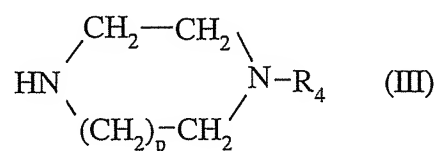


in which p and R_4 are as defined in Claim 1;
 and deprotection of the hydroxyl or amine functions present in R_3 where appropriate.

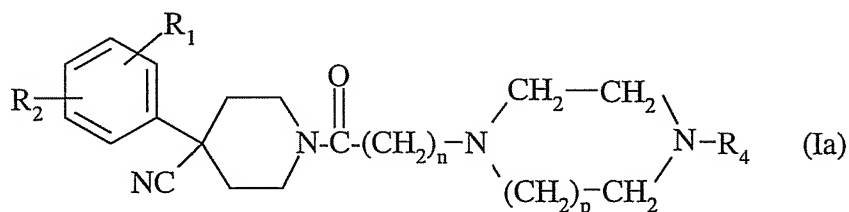
9. (Previously presented): A process for preparing a compound according to Claim 1 in which R_3 represents a group $-\text{CH}_2\text{NR}_{12}\text{R}_{13}$ in which R_{12} and R_{13} each represent hydrogen wherein a compound of formula (IIc) or (IId)



in which R_1 and R_2 are as defined in Claim 1 and Hal represents a halogen atom, is reacted with a compound of formula (III)

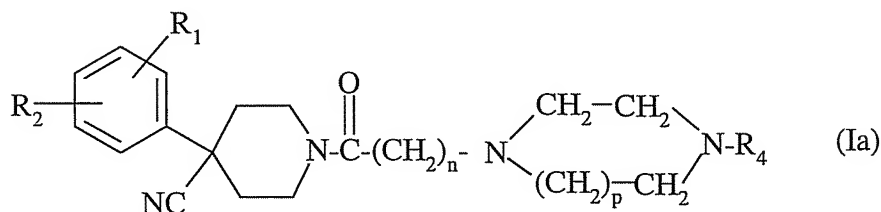


in which p and R₄ are as defined in Claim 1 to give a compound of formula (Ia)



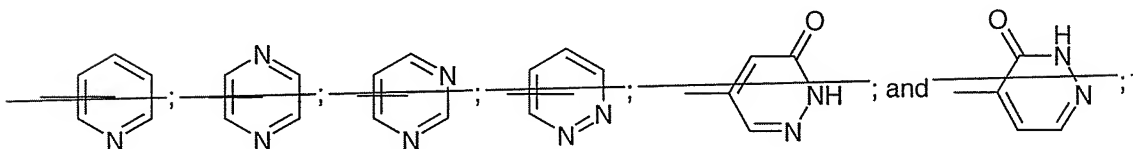
and the cyano group of the compound of formula (Ia) is reduced.

10. (Currently amended): A compound of formula (Ia)



in which:

- n is 1 or 2;
- p is 1 or 2;
- R₁ represents a halogen atom; a trifluoromethyl radical; a (C₁-C₄)alkyl; a (C₁-C₄)alkoxy; or a trifluoromethoxy radical;
- R₂ represents a hydrogen atom or a halogen atom;
- R₄ represents **a pyrazinyl an aromatic group selected from:**



the said aromatic groups which is being unsubstituted or mono- or disubstituted by a substituent selected independently from a halogen atom, a (C₁-C₄)alkyl, a (C₁-C₄)alkoxy, a trifluoromethoxy radical;

or an acid addition salt ~~hydrate or solvate~~ thereof.

Claims 11-13 (Cancelled)

14. (Currently amended) A compound according to Claim 1 selected from the group consisting of:

1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
5-[4-[2-[4-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-piperidyl]-2-oxoethyl]-1-piperazinyl]-3(2H)-pyridazinone;
1-[4-hydroxy-4-[2-(trifluoromethyl)phenyl]-1-piperidyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
2-[4-(4-pyrimidinyl)-1-piperazinyl]-1-[4-[3-(trifluoromethyl)phenyl]-3,6-dihydro-1(2H)-pyridyl]-1-ethanone;
2-[4-(2-pyrazinyl)-1-piperazinyl]-1-[4-[2-(trifluoromethyl)phenyl]-3,6-dihydro-1(2H)-pyridyl]-1-ethanone;
1-[2-[4-(2-pyrazinyl)-1-piperazinyl]acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinecarboxamide;
1-[4-(dimethylamino)-4-[3-(trifluoromethyl)phenyl]-1-piperidyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
1-[4-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-piperidyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
1-[4-(4-chlorophenyl)-3,6-dihydro-1(2H)-pyridyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
1-[4-hydroxy-4-(3-methoxyphenyl)-1-piperidyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
1-[4-[4-chloro-3-(trifluoromethyl)phenyl]-3,6-dihydro-1(2H)-pyridyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
1-[4-[4-chloro-3-(trifluoromethyl)phenyl]-3,6-dihydro-1(2H)-pyridyl]-2-[4-[5-(trifluoromethyl)-2-pyridyl]-1-piperazinyl]-1-ethanone;
1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;

1-[4-[(diethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidyl]-
2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
1-[4-[(isopropylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidyl]-
2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
1-[4-[(isobutylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidyl]-
2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
1-[4-[(isopentylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidyl]-
2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone;
1-[4-[(N-methylisopentylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-
1-piperidyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone; and
1-[4-hydroxy-4-[3-(trifluoromethoxy)phenyl]-1-piperidyl]-2-[4-(2-pyrazinyl)-
1-piperazinyl]-1-ethanone;
or an acid addition salt, ~~hydrate or solvate~~ thereof.

15. (Original) A pharmaceutical composition comprising a compound according to Claim 1 together with a pharmaceutically acceptable excipient.

16. (Original) A pharmaceutical composition comprising a compound according to Claim 2 together with a pharmaceutically acceptable excipient.

17. (Original) A pharmaceutical composition comprising a compound according to Claim 3 together with a pharmaceutically acceptable excipient.

18. (Original) A pharmaceutical composition comprising a compound according to Claim 4 together with a pharmaceutically acceptable excipient.

19. (Original) A pharmaceutical composition comprising a compound according to Claim 5 together with a pharmaceutically acceptable excipient.

20. (Original) A pharmaceutical composition comprising a compound according to Claim 6 together with a pharmaceutically acceptable excipient.

21. (Original) A pharmaceutical composition comprising a compound according to Claim 14 together with a pharmaceutically acceptable excipient.

22. (Currently amended) A method for the treatment of central or peripheral neurodegenerative diseases; amyotrophic lateral sclerosis, multiple sclerosis; cardiovascular conditions; peripheral neuropathies; damage to the optic nerve and to the retina; spinal cord trauma and cranial trauma; atherosclerosis; stenoses; cicatrization; alopecia; cancers; tumours; metastases; leukaemias; chronic neuropathic and inflammatory pain; autoimmune diseases; or bone fractures; ~~or bone diseases~~, which comprises administering to a patient in need of such treatment a therapeutically effective amount of a compound according to Claim 1.

23. (Currently amended) A method for the treatment of central or peripheral neurodegenerative diseases; amyotrophic lateral sclerosis, multiple sclerosis; cardiovascular conditions; peripheral neuropathies; damage to the optic nerve and to the retina; spinal cord trauma and cranial trauma; atherosclerosis; stenoses; cicatrization; alopecia; cancers; tumours; metastases; leukaemias; chronic neuropathic and inflammatory pain; autoimmune diseases; or bone fractures; ~~or bone diseases~~, which comprises administering to a patient in need of such treatment a therapeutically effective amount of a compound according to Claim 2.

24. (Currently amended) A method for the treatment of central or peripheral neurodegenerative diseases; amyotrophic lateral sclerosis, multiple sclerosis; cardiovascular conditions; peripheral neuropathies; damage to the optic nerve and to the retina; spinal cord trauma and cranial trauma; atherosclerosis; stenoses; cicatrization; alopecia; cancers; tumours; metastases; leukaemias; chronic neuropathic and inflammatory pain; autoimmune diseases; or bone fractures; ~~or bone diseases~~, which comprises administering to a patient in need of such treatment a therapeutically effective amount of a compound according to Claim 3.

25. (Currently amended) A method for the treatment of central or peripheral neurodegenerative diseases; amyotrophic lateral sclerosis, multiple sclerosis; cardiovascular conditions; peripheral neuropathies; damage to the optic nerve and to the retina; spinal cord trauma and cranial trauma; atherosclerosis; stenoses; cicatrization; alopecia; cancers; tumours; metastases; leukaemias; chronic neuropathic and inflammatory pain; autoimmune diseases; or bone fractures; ~~or bone diseases~~, which

comprises administering to a patient in need of such treatment a therapeutically effective amount of a compound according to Claim 4.

26. (Currently amended) A method for the treatment of central or peripheral neurodegenerative diseases; amyotrophic lateral sclerosis, multiple sclerosis; cardiovascular conditions; peripheral neuropathies; damage to the optic nerve and to the retina; spinal cord trauma and cranial trauma; atherosclerosis; stenoses; cicatrization; alopecia; cancers; tumours; metastases; leukaemias; chronic neuropathic and inflammatory pain; autoimmune diseases; or bone fractures; ~~or bone diseases~~, which comprises administering to a patient in need of such treatment a therapeutically effective amount of a compound according to Claim 5.

27. (Currently amended) A method for the treatment of central or peripheral neurodegenerative diseases; amyotrophic lateral sclerosis, multiple sclerosis; cardiovascular conditions; peripheral neuropathies; damage to the optic nerve and to the retina; spinal cord trauma and cranial trauma; atherosclerosis; stenoses; cicatrization; alopecia; cancers; tumours; metastases; leukaemias; chronic neuropathic and inflammatory pain; autoimmune diseases; or bone fractures; ~~or bone diseases~~, which comprises administering to a patient in need of such treatment a therapeutically effective amount of a compound according to Claim 6.

28. (Currently amended) A method for the treatment of central or peripheral neurodegenerative diseases; amyotrophic lateral sclerosis, multiple sclerosis; cardiovascular conditions; peripheral neuropathies; damage to the optic nerve and to the retina; spinal cord trauma and cranial trauma; atherosclerosis; stenoses; cicatrization; alopecia; cancers; tumours; metastases; leukaemias; chronic neuropathic and inflammatory pain; autoimmune diseases; or bone fractures; ~~or bone diseases~~, which comprises administering to a patient in need of such treatment a therapeutically effective amount of a compound according to Claim 14.